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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,044	12/15/2003	Hiroyuki Inoue	9976-23US (OB0051US)	4060
570	7590	09/22/2005	EXAMINER	
AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			BEATTY, ROBERT B	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,044

Applicant(s)

INOUE ET AL.

Examiner

Robert Beatty

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 16-19 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 4-15 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The disclosure is objected to because of the following informalities:
on page 13, line 4; page 14, line 8,10,11; page 20, line 11, all forms of the term "suck" is awkward in this context and should be changed to --attract--
Appropriate correction is required.

3. The drawings are objected to because in Figs 4 and 14, the boxes should have labels; . Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the

changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2,21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama (JP# 09-171275).

Nakayama teach an image forming apparatus comprising a plurality of image forming units 51a, 51b, 51c, 51d for forming developing latent images with developer material, an intermediate belt 71 for having the developed images transferred thereto, and a fixing unit for fixing the image to a recording sheet. A temperature detector 81 is in contact with the transfer belt and detects the temperature of the transfer belt. In accordance with this detected temperature a process for forming the images (image write timing) will be adjusted. The temperature detector is located downstream where the recording sheet separates from the transfer belt (at the location of transfer).

5. Claims 21,23 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuzawa et al.

Matsuzawa et al. teach an image forming apparatus comprising a plurality of image forming units Ta, Tb, Tc, Td for forming developing latent images with developer material, an transfer belt 31 for having the developed images transferred thereto, and a fixing unit 40 for fixing the image to a recording sheet. A temperature detector 53 detects the temperature of the transfer belt via drive roller (col.6, lines 18-21). In accordance with this detected temperature a process for forming the images (transfer belt speed / image forming timings) will be adjusted (col.7, lines 14-39). The temperature detector is near the image forming unit Td closest to the fixing unit.

6. Claims 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato (JP 04-21870).

Kato teach an image forming apparatus having a temperature detector 32 located on a cover, and a control unit for controlling the paper heater when the paper is conveyed in accordance with the temperature detected by the detector.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3,17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama (JP# 09-171275) in view of Hirose et al.

Nakayama taught supra discloses most of what is claimed except when the detected temperature is higher than a threshold to temporarily stop the image forming apparatus, to reduce the recording sheet conveyance speed, and to widen the conveyance interval of the recording sheet. Hirose teach an image forming apparatus having a temperature sensor 25, 125-128 at various locations in the apparatus and when the temperature is above a threshold, the image forming apparatus is temporarily stopped (col.5, lines 39-46), widens the conveyance interval between recording sheets (col.5, lines 49-57), or reduces speed of the recording sheet (col.5, lines 15-27) . It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nakayama with the concept of either temporarily stopping, slowing down, or lengthening the conveyance interval between recording sheets because trouble and abnormal images due to high internal temperatures can be prevented.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama (JP# 09-171275) in view of Miura.

Nakayama taught supra discloses most of what is claimed except when simplex (one-side) copying is required, to perform the copy operation. Miura teach an image forming apparatus which receives image data, stores this data, and performs a copy operation using this received data. It would have been obvious to one of ordinary skill in the art at the time the invention was made to receive and print data in a digital format as taught in Miura because it can be stored if certain conditions are not met thus preventing an erroneous print operation.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama (JP# 09-171275) in view of Fujiwara (JP# 2000-347531).

Nakayama taught supra discloses most of what is claimed except reducing the fixing temperature depending on the detected temperature of the apparatus/transfer body. Fujiwara teach lowering the target temperature of the fixing roller is a detected temperature 18 detects a higher than normal temperature. It would have been obvious to one of ordinary skill in the art at the time the invention was made to lower the fixing target temperature because defective fixing and wrinkles in the images can be prevented.

10. Claims 4-15,20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rodriguez, Jung, Sugiura, Yamada, JP# '833, JP# '517, Saito (JP), Endo (JP), and Yoshino (JP) all teach various temperature sensors in image forming apparatus and the processes that are controlled according to the temperature sensed.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Beatty whose telephone number is (571) 272-2130. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley, can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Robert Beatty". The signature is fluid and cursive, with a long horizontal stroke at the end.

Robert Beatty
Primary Examiner
Art Unit 2852

September 16, 2005